

Claims 5-11 (canceled)

Claim 12 (currently amended): A method for producing an organic thin film according to ~~any one of claim 1 through claim 11~~, wherein a water content within said organic solvent solution is either set or maintained within a range from 50 to 1,000 ppm.

Claim 13 (canceled)

Claim 14 (currently amended): A method for producing an organic thin film according to ~~any one of claim 1 through claim 13~~, wherein said catalyst capable of interacting with said metal-based surfactant is at least one material selected from a group consisting of metal oxides; metal hydroxides; metal alkoxides; chelated or coordinated metal compounds; partial hydrolysis products of metal alkoxides; hydrolysis products obtained by treating a metal alkoxide with a two-fold or greater equivalence of water; organic acids; silanol condensation catalysts; and acid catalysts.

Claims 15-18 (canceled)

Claim 19 (currently amended): A method for producing an organic thin film according to ~~any one of claim 1 through claim 18~~, wherein said metal-based surfactant having at least one hydrolyzable group is a compound represented by a formula (I) shown below:



(wherein, R^1 represents a hydrocarbon group that may contain a substituent, a halogenated hydrocarbon group that may contain a substituent, a hydrocarbon group containing a linkage group, or a halogenated hydrocarbon group containing a linkage group, M represents at least one metal atom selected from a group consisting of a silicon atom, germanium atom, tin atom, titanium atom, and zirconium atom, X represents a hydroxyl group or a hydrolyzable group, n represents an integer from 1 to (m-1), m represents an atomic valence of said metal M, and in those cases where n is 2 or greater, said R^1 groups are either identical or different, and in those cases where (m-n) is 2 or

greater, said X groups are either identical or different, although of (m-n) X groups, at least one X group is a hydrolyzable group).

Claims 20-21 (canceled)

Claim 22 (original): A method for producing an organic thin film in which an organic thin film is formed on a surface of a substrate, comprising a step of bringing said substrate into contact with an organic solvent solution comprising a metal-based surfactant having at least one hydroxyl group, wherein a water content within said organic solvent solution is either set or maintained within a predetermined range.

Claim 23 (original): A method for producing an organic thin film according to claim 22, wherein a water content within said organic solvent solution is either set or maintained within a range from 50 to 1,000 ppm.

Claim 24 (currently amended): A method for producing an organic thin film according to ~~either one of claim 22 and claim 23~~, wherein said metal-based surfactant having at least one hydroxyl group is a compound represented by a formula (III) shown below:



(wherein, R^1 represents a hydrocarbon group that may contain a substituent, a halogenated hydrocarbon group that may contain a substituent, a hydrocarbon group containing a linkage group, or a halogenated hydrocarbon group containing a linkage group, M represents at least one metal atom selected from a group consisting of a silicon atom, germanium atom, tin atom, titanium atom, and zirconium atom, X represents a hydroxyl group or a hydrolyzable group, n represents an integer from 1 to (m-1), m represents an atomic valence of said metal M, and in those cases where n is 2 or greater, said R^1 groups are either identical or different, and in those cases where (m-n-1) is 2 or greater, said X groups are either identical or different).

Claim 25 (currently amended): A method for producing an organic thin film according to ~~any one of claim 1 through claim 24~~, wherein said step of bringing said substrate into contact with said organic solvent solution is conducted within a space that is maintained at a humidity of at least 40% RH.

Claim 26 (currently amended): A method for producing an organic thin film according to ~~any one of claim 1 through claim 24~~, wherein said step of bringing said substrate into contact with said organic solvent solution is conducted within a space that is maintained at a humidity of at least 60% RH.

Claim 27 (currently amended): A method for producing an organic thin film according to ~~any one of claim 1 through claim 26~~, wherein said organic solvent solution is a hydrocarbon-based solvent solution or a fluorinated hydrocarbon-based solvent solution.

Claim 28 (currently amended): A method for producing an organic thin film according to ~~any one of claim 1 through claim 27~~, wherein said organic thin film is a crystalline organic thin film.

Claim 29 (currently amended): A method for producing an organic thin film according to ~~any one of claim 1 through claim 28~~, wherein said organic thin film is a monomolecular film.

Claims 30-34 (canceled)

Claim 35 (original): A self-assembly film forming solution for forming a self-assembly film on a surface of a substrate, wherein molecules for forming said self-assembly film form an aggregate within said solution.

Claim 36 (original): A self-assembly film forming solution according to claim 35, wherein molecules for forming said self-assembly film are molecules of either a metal-based surfactant having at least one hydroxyl group or hydrolyzable group, or a derivative thereof.

Claim 37 (currently amended): A self-assembly film forming solution according to either ~~one of claim 35 and claim 36~~, wherein said aggregate is obtained by treating a metal-based surfactant having at least one hydroxyl group or hydrolyzable group with a catalyst capable of interacting with said metal-based surfactant, and water.

Claims 38-40 (canceled)

Claim 41 (currently amended): A self-assembly film forming solution according to ~~any one of claim 35 to claim 40~~, wherein an average particle diameter of said aggregate is within a range from 10 to 1,000 nm.

Claim 42 (currently amended): A self-assembly film forming solution according to ~~any one of claim 35 to claim 41~~, wherein a zeta potential of said aggregate is equal to or greater than a zeta potential of said substrate within an identical solution.

Claim 43 (canceled)

Claim 44 (original): A chemically adsorbed film formed on a substrate, wherein said substrate is not crystalline, and said chemically adsorbed film is crystalline.

Claims 45-48 (canceled)

Claim 49 (original): A method for producing a monomolecular film, comprising a step of applying an organic solvent solution comprising a metal-based surfactant having a hydroxyl group, hydrocarboxy group, or acyloxy group to a substrate, using at least one method selected from a

greater, said X groups are either identical or different, although of (m-n) X groups, at least one X group is a hydrolyzable group).

Claim 58 (new): A method for producing an organic thin film according to claim 3, wherein said step of bringing said substrate into contact with said organic solvent solution is conducted within a space that is maintained at a humidity of at least 40% RH.

Claim 59 (new): A method for producing an organic thin film according to claim 3, wherein said step of bringing said substrate into contact with said organic solvent solution is conducted within a space that is maintained at a humidity of at least 60% RH.

Claim 60 (new): A method for producing an organic thin film according to claim 3, wherein said organic solvent solution is a hydrocarbon-based solvent solution or a fluorinated hydrocarbon-based solvent solution.

Claim 61 (new): A method for producing an organic thin film according to claim 3, wherein said organic thin film is a crystalline organic thin film.

Claim 62 (new): A method for producing an organic thin film according to claim 3, wherein said organic thin film is a monomolecular film.

Claim 63 (new): A method for producing an organic thin film according to claim 22, wherein said step of bringing said substrate into contact with said organic solvent solution is conducted within a space that is maintained at a humidity of at least 40% RH.

Claim 64 (new): A method for producing an organic thin film according to claim 22, wherein said step of bringing said substrate into contact with said organic solvent solution is conducted within a space that is maintained at a humidity of at least 60% RH.

Claim 65 (new): A method for producing an organic thin film according to claim 22, wherein said organic solvent solution is a hydrocarbon-based solvent solution or a fluorinated hydrocarbon-based solvent solution.

Claim 66 (new): A method for producing an organic thin film according to claim 22, wherein said organic thin film is a crystalline organic thin film.

Claim 67 (new): A method for producing an organic thin film according to claim 22, wherein said organic thin film is a monomolecular film.